



Wastewater

RM-10®

Clay-Based Flocculant

CETCO provides a comprehensive line of world-renown RM -10 clay-based flocculants. These granular, semi-granular, powdered and liquid varieties are formulated to treat a vast array of industrial and municipal wastewater. The RM -10 products are a non-hazardous blend of naturally occurring bentonite, pH adjusting agents, polymers and other exclusive components.

Application

One-step removal of emulsified oil, heavy metals and suspended solids from wastewater streams

Applications & Basic Mixing Instructions for

All Listed Dry Formulations

- Fill reaction vessel with wastewater and start mixer
- 2-3 minutes; observe large floc forming
- Stop mixer and allow floc to settle for 3-5 minutes
- Start mixer and mix for approximately 30 seconds
- Stop mixer and allow floc to settle for 3-5 minutes
- Open effluent valve to allow clean water to pass through filter media
- Open sludge valve to allow solids to be filtered over filter media and further de-watered
- Clean water is collected and typically discharged to Publicly Owned Treatment Works (POTW) or recycled back into the process
- De-watered solids collected for disposal at local land fill

Features & Benefits

- System meets POTW discharge limits various particle sizes
- Lower overall costs
- Treat onsite
- Dry chemical versions for easy storage, movement and minimal dusting
- Decreased process time
- Versatile technology with consistent results
- Safe and cost-effective mean of treatment and disposal for various wastewater streams

How RM-10 Treatment Works

- Chemical components adjust the pH of the water to enhance the precipitation of metals and breaks oil emulsions
- Bentonite clay particles attract and encapsulate precipitated metallic ions
- The polymeric portion of the formulation attracts remaining oils and suspended solids then forms a floc, which settles to the bottom of the treatment vessel
- The bentonite clay and polymer work together to create a strong filterable floc, which will encapsulate and contain heavy metals through a pozzolanic reaction while allowing the floc to readily release water resulting in a drier sludge cake

The entire process is completed in just a few minutes, resulting in clear water that can be discharged directly to a POTW or recycled. The sludge and its encapsulated contaminants are highly resistant to leaching and can be generally disposed of as a non-hazardous waste.

TECHNICAL SPECIFICATIONS (DRY)

Formulation #	Particle Type	Bulk Density (lbs./ft ³)	pH (5% dispersion)	Formulation #	Particle Type	Bulk Density (lbs./ft ³)	pH (5% dispersion)
2001	Semi-Granular	70 ± 2	8.5 - 10.5	4004	Granular	70 ± 2	4.0 - 6.0
2002	Semi-Granular	70 ± 2	3.5 - 5.5	4005	Granular	70 ± 2	6.5 - 8.5
2003	Semi-Granular	70 ± 2	5.5 - 7.5	4006	Granular	70 ± 2	3.5 - 5.5
2004	Semi-Granular	70 ± 2	3.5 - 5.5	4007	Granular	70 ± 2	6.5 - 8.5
2005	Powder	66 ± 2	2.5 - 4.5	4008	Granular	70 ± 2	6.5 - 8.5
2006	Semi-Granular	70 ± 2	3.0 - 4.0	4009	Granular	70 ± 2	3.0 - 4.0
2008	Semi-Granular	70 ± 2	2.5 - 4.5	4010	Granular	70 ± 2	3.0 - 4.0
2009	Semi-Granular	70 ± 2	2.5 - 4.5	5001	Granular	65 ± 2	2.5 - 4.0
2013	Semi-Granular	70 ± 2	8.5 - 10.5	5002	Semi-Granular	70 ± 2	3.0 - 5.0
2014	Semi-Granular	70 ± 2	2.4 - 4.5	5004	Granular	65 ± 2	2.5 - 4.0
2015	Semi-Granular	70 ± 2	4.0 - 6.0	5005	Semi-Granular	70 ± 2	3.0 - 5.0
2017	Powder	70 ± 2	10.0 - 12.0	5006	Granular	65 ± 2	2.5 - 3.5
2018	Powder	66 ± 2	2.5 - 4.5	5007	Granular	65 ± 2	2.5 - 4.0
2019	Semi-Granular	70 ± 2	6.5 - 8.5	5008	Granular	65 ± 2	2.5 - 3.5
2020	Semi-Granular	70 ± 2	3.0 - 4.0	5009	Granular	65 ± 2	2.5 - 3.5
2021	Semi-Granular	70 ± 2	3.0 - 5.0	5010	Granular	65 ± 2	2.5 - 4.0
2022	Semi-Granular	70 ± 2	2.5 - 4.5	5011	Granular	65 ± 2	2.5 - 4.0
2025	Semi-Granular	70 ± 2	2.5 - 4.5	5012	Granular	65 ± 2	2.5 - 4.0
3001	Granular	62 ± 2	8.5 - 10.5	5501	Granular	65 ± 2	2.5 - 4.0
3204	Granular	62 ± 2	8.5 - 10.5	6001	Granular	65 ± 2	2.5 - 4.0
4001	Semi-Granular	70 ± 2	6.5 - 8.5	Eveready	Powder	70 ± 2	5.5 - 7.5
4003	Granular	70 ± 2	3.0 - 5.0	NS121	Semi-Granular	70 ± 2	7.5 - 9.5

TECHNICAL SPECIFICATIONS (LIQUID)

Formulation #	Particle Type	Bulk Density (lbs./gal)	pH (100 ppm in H ₂ O)
LMR-1	Liquid	9.8	8.5 - 10